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REMARKS

Applicant certainly appreciates the indication of allowance of claims 3 and 14 if rewritten to become independent, incorporating all the requirements of the parent claims and any intervening claims. Applicant has accordingly amended these claims. Claim 22 is amended to correct the minor error. A check for \$168 is enclosed for the two additional independent claims.

In the prior amendment, Applicant argued that Wanthal did not disclose the invention as claimed, singly or in combination with the other references. While Applicant still maintains this position, Applicant is now submitting that Wanthal is not prior art. Wanthal is a paper that was presented at a closed session conference. Only a select group of persons associated with the defense industry in the United States were allowed to attend the conference. No copies of the paper were given out. The paper is not available publicly, nor is it listed on any public databases. Applicant is in possession of Wanthal because the co-inventor is an employee of the assignee of this application. Applicant respectfully requests the examiner to withdraw Wanthal as a reference.

The examiner cited a new reference, Meyres. Applicant respectfully submits that Meyres does not suggest the invention. The material XC-142 discussed at column 3, lines 33-55 is an injection molded material that has a tensile strength of 2300 psi. This material is not a resin that is infused with a fabric to form a laminate. Referring to Figure 1 and the text at column 4, line 62, the only resin-infused portion of the shuttle is laminated sidewalls 3. The resin for forming sidewalls 3 is conventional, not the XC-142 material. The XC-142 material is used only in the compression molding of cores 1. The XC-142 core material is high impact resistant cross-linked polyethylene as stated at column 5, lines 2-4 and 9. The XC-142 material is not an adhesive for bonding components together, rather it is a plastic injection molded material. The compression molding procedure is also discussed at column 5, line 15. As stated in column 5, lines 28-32, the

compression molded cores 1 are coated with an epoxy adhesive to secure them to the plastic laminate sidewalls 3. The reference thus does not suggest using any type of adhesive to infuse within a woven preform.

Regarding the other references, Bersuch discloses a woven preform and mentions that it cures, but does not disclose any adhesive within the preform. Sheahen discloses the use of preforms but does not disclose infusing the preform within an adhesive. The preforms of Sheahen rather were impregnated through a resin film infusion process. The adhesives mentioned by Sheahen comprise films that bonded the resin infused preforms to the substrates. There is no suggestion in Sheahen of infusing adhesives into the preforms.

Claim 1 requires providing a preform of woven fabric, infusing the preform with an adhesive, and adhering at least one surface of the preform to one surface of a first component using the adhesive within the preform. Then it requires curing the adhesive and attaching a second component to the preform. None of the references discloses infusing a woven preform with an adhesive. Note that the term "adhesive" in the claim should be interpreted as defined in the specification. That is, it is not a laminating resin, rather it is a composition that has a greater peel strength than resins and a lesser tensile strength than resins. Bersuch and Sheahen disclose resin infused preforms, not adhesive infused preforms.

Meyres discloses a high impact plastic that has a tensile strength in the range for adhesives, however that plastic is used in a compression molding process, not to infuse within a preform.

Claim 2 requires that adhesive have a tensile strength less than 6500 psi. Applicant submits that Meyres does not disclose woven preforms infused with a material that has a tensile strength less than 6500 psi.

Claim 4 requires adhering the second component to the preform using the adhesive within the preform prior to curing the adhesive. Bersuch, on the second page, second column, third paragraph, states that 3-D woven preforms should be impregnated with resin just prior to co-curing them into the laminated composite structure. There is no mention of adhesives. Sheahen discusses adhesives on page 7, fourth paragraph, however these refer to film adhesives, and there is no mention of infusing a woven preform with such adhesive. Rather, the woven preforms are impregnated with a resin as mentioned on page 7, second column, next to the last paragraph.

Claim 8 depends from claim 1, stating that the preform contains no resin. All the references that show performs disclose resin infusion of the preforms. Claim 12 requires providing a resin-free woven preform then infusing the woven preform with an adhesive. This step is not suggested in any of the references.

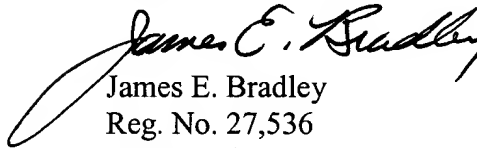
Claim 17 requires a resin-free woven T-shaped preform and requires infusing the preform with an adhesive that has a tensile strength less than 6500 psi. As previously discussed, the only reference showing any material with tensile strength of less than 6500 psi is a high impact plastic material that is used in compression molding, not for infusing within a woven preform.

Claim 20 further defines claim 17, requiring that the adhesive have a peel strength greater than 15 lbs. per lineal inch. This is not suggested in the references. Claim 21 requires infusing a woven preform with an adhesive that has a tensile strength less than 6500 psi and a peel strength greater than 15 lbs. per lineal inch. This step is not mere design choice, rather it is a dramatic departure from what has been done in the past.

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It is respectfully submitted that the claims are now in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,


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